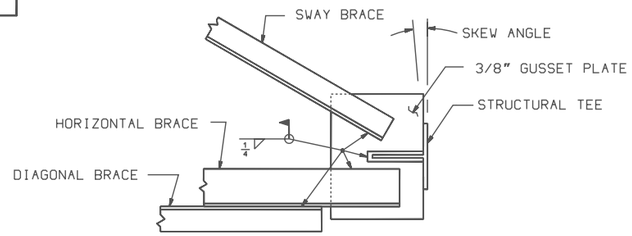
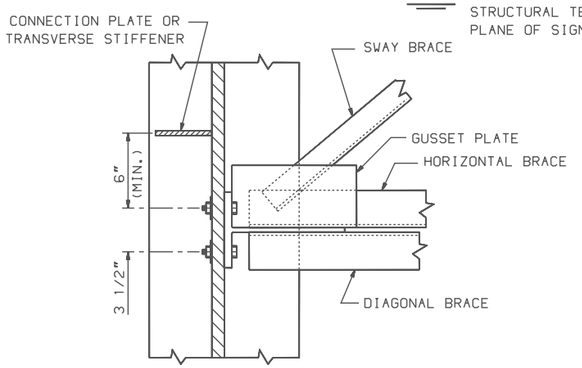
STANDARD NO. BR-S1

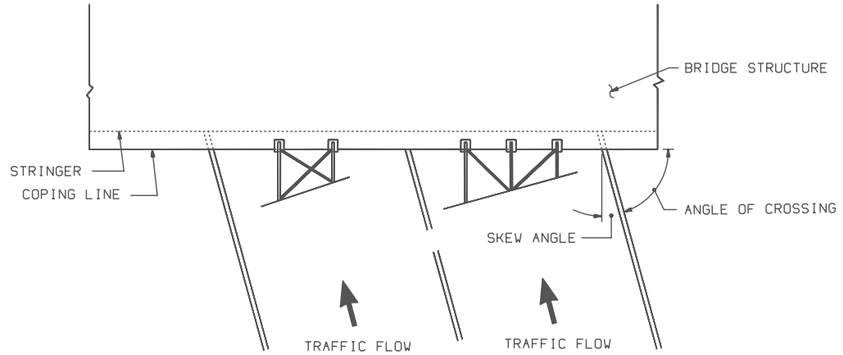


SECTION C-C

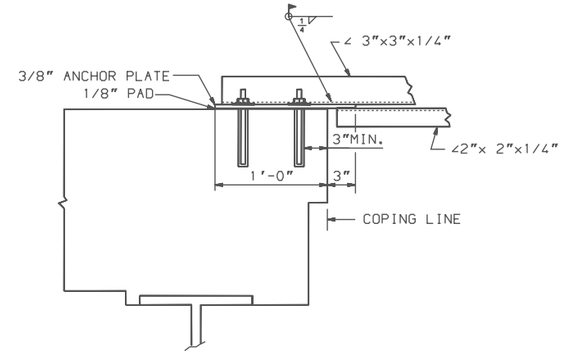
NOTE: SLOT GUSSET PLATE TO ACCOMMODATE VERTICAL BRACE STRUCTURAL TEE. SKEW GUSSET PLATE AND TEE SO PLANE OF SIGN IS 90° TO DIRECTION OF TRAVEL.



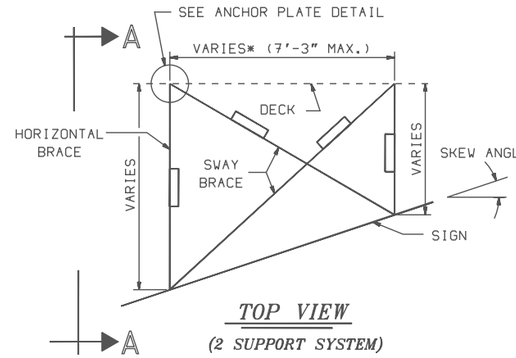
SECTION B-B



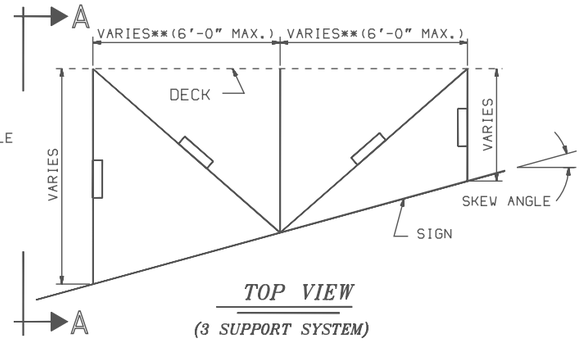
PLAN VIEW



ANCHOR PLATE ELEVATION



TOP VIEW
(2 SUPPORT SYSTEM)



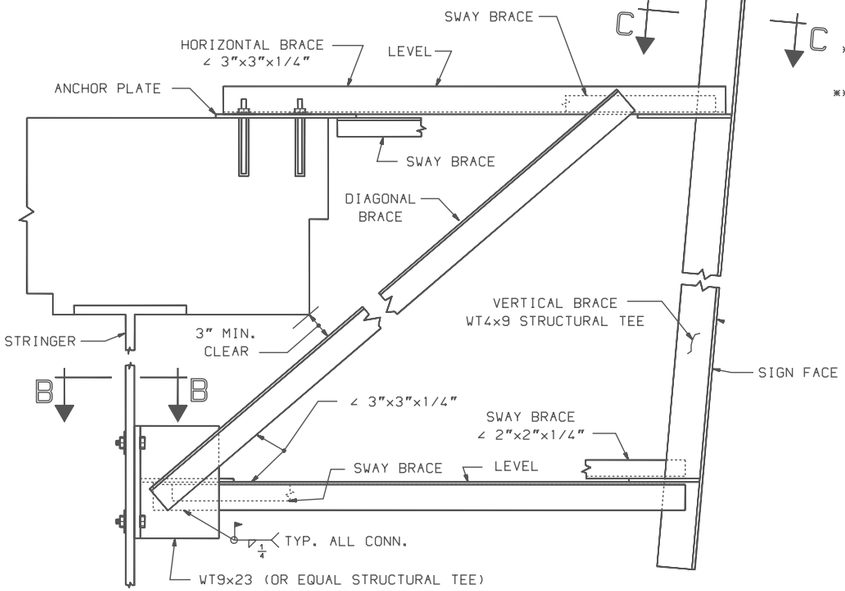
TOP VIEW
(3 SUPPORT SYSTEM)

ANCHOR PLATE NOTES

1a) 1/2" Ø HIGH STRENGTH GALVANIZED EXPANSION BOLT 7" LONG (1½" ABOVE TOP OF CONCRETE) WITH STD. GALVANIZED NUT & WASHER IN DRILLED HOLE. THE HOLE SHALL BE FILLED WITH HIGH STRENGTH-NON SHRINK GROUT AFTER THE EXPANSION BOLT IS ANCHORED. (TYP.)

1b) (ALTERNATE) 1/2" Ø HIGH STRENGTH GALVANIZED BOLTS SET IN PLACE BEFORE PLACEMENT OF THE CONCRETE.

2) BRIDGE-MOUNTED SIGNS SHALL HAVE A MIN. OF TWO ANCHOR PLATES, WITH AT LEAST ONE PLATE LOCATED BETWEEN ADJACENT RAIL POSTS.



WT9x23 (OR EQUAL STRUCTURAL TEE) ATTACH TO STRINGER WEB WITH FOUR 7/8" Ø HIGH-STRENGTH BOLTS IN 15/16" Ø HOLES, FIELD DRILLED AS APPROVED BY THE ENGINEER. HOLES SHALL BE MIN. 6" CLEAR FROM STRINGER CROSS-FRAME CONNECTION PLATES OR TRANSVERSE STIFFENERS.

VIEW A-A

SCALE: 1 1/2" = 1'-0"

SUPPORT SYSTEM NOTES

* 1) DISTANCE BETWEEN HORIZONTAL MEMBERS SHALL BE 60% OF SIGN WIDTH ON CENTER FOR SIGNS WITH WIDTHS ≤ 12'-0" (TWO SUPPORT SYSTEM).

** 2) DISTANCE BETWEEN HORIZONTAL MEMBERS SHALL BE ONE-THIRD OF SIGN WIDTH ON CENTER FOR SIGN WIDTHS 12'-0" TO 18'-0" (THREE SUPPORT SYSTEM).

3) DIAGONAL SWAY MEMBERS SHALL BE ∠ 2"x2"x1/4" AND SHALL BE ERECTED TWO TOP AND TWO BOTTOM.

4) LENGTHS OF HORIZONTAL MEMBERS VARY TO PROVIDE BRIDGE CLEARANCE AND TO ACCOMMODATE SKEW ANGLE.

5) THE FACE OF ALL STRUCTURAL TEES SHALL LIE IN THE SAME PLANE.

6) SIGNS SHALL BE CENTERED WITHIN TRAVEL LANES, OR AS APPROVED.

GENERAL NOTES

1) ALL STRUCTURAL STEEL SHALL BE AASHTO DESIGNATION M270 GRADE 50W (ASTM A709 GRADE 50W), UNPAINTED OR AASHTO M270 GRADE 36 (ASTM A709 GRADE 36) GALVANIZED, CONTRACTOR'S OPTION.

2) THE CONTRACTOR SHALL TAKE ALL MEASUREMENTS NECESSARY TO INSURE THE PROPER ATTACHMENT OF THE PROPOSED SIGN TO THE BRIDGE STRUCTURE.

3) NO PART OF SIGN STRUCTURE SHALL PROJECT BELOW THE BOTTOM FLANGE OF BRIDGE GIRDER OR REDUCE THE STRUCTURE'S VERTICAL CLEARANCE.

4) THE LOCATION OF THE PROPOSED SIGN ON THE BRIDGE STRUCTURE SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

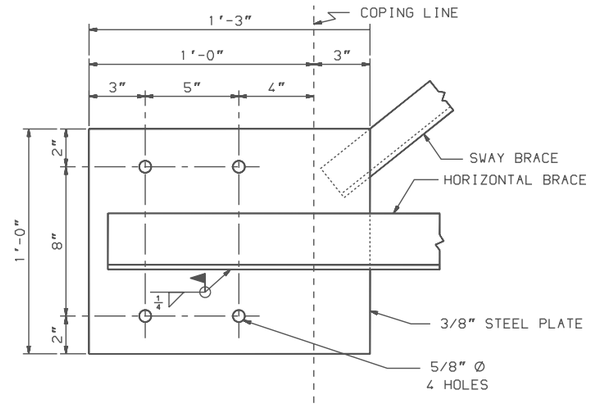
5) ALL BOLTS AND RELATED HARDWARE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M164 (ASTM A325) TYPE 1 (OR TYPE 3 FOR WEATHERING STEEL MATCH).

6) ALL WORK AND MATERIALS ON THIS SHEET SHALL BE PAID UNDER ITEM 615.30001. EXISTING SIGN BRACKETS SHALL BE REMOVED AS PART OF ITEM 502.

7) THE SUPPORT BRACING SHALL BE DETAILED TO PROVIDE A LEVEL SIGN POSITION, REGARDLESS OF THE GRADE OF THE BRIDGE STRUCTURE. THE DESIGN AND DETAILS OF THE BRACING SHALL PROVIDE PRACTICAL SPACE FOR PAINTING (IF REQUIRED) AND INSPECTION OF THE BEAMS.

8) PREFORMED ELASTOMERIC BEARING PAD (⅛" THICK) SHALL CONFORM TO AASHTO M251.

9) THE NEW SIGN(S) SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.



ANCHOR PLATE DETAIL

THESE PLANS REDUCED APPROXIMATELY ½ SCALE

WINDOW NAME	*.FGB FILE NAME	SHEET SCALE
BR-S1	BR-STNDS-NHBOOK	AS NOTED

REVISION DATES
1/2/01

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION, CONCORD, N.H.

TYPICAL BRIDGE-MOUNTED SIGN BRACKETS

STANDARD PLANS

STANDARD NO. BR-S1